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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/622,924	10/26/2000	Timothy William Grinsted	108149-00000	6806

6449 7590 07/10/2003

ROTHWELL, FIGG, ERNST & MANBECK, P.C.
1425 K STREET, N.W.
SUITE 800
WASHINGTON, DC 20005

EXAMINER

GONZALEZ, JULIO C

ART UNIT	PAPER NUMBER
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2834

DATE MAILED: 07/10/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/622,924	GRINSTED ET AL.	
	Examiner	Art Unit	
	Julio C. Gonzalez	2834	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 23 June 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 49-51 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 49-51 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 26 October 2000 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
 If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 a) ☐ All b) ☐ Some * c) ☐ None of:
 1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
 * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
 a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Drawings

1. The drawings are objected to because figures 8A, 8B, 13A, 13B, 14A, 14B, 15A, 15B, 16A and 16B are not described in the specifications. A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

Claim Rejections - 35 USC § 112

2. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

3. Claims 49-51 are rejected under 35 U.S.C. 112, first paragraph, as containing subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention.

The disclosure mentions that the buoyant tank is below the water, yet in figure 1, the buoyant is above the surface.

Moreover, how will the turbine compress and decompress the air (as disclosed in the specifications) if the buoyant tank is below the surface water? Where is the air coming from?

What is the purpose of the turbines? Does the compression and decompression of air aid in the vertical movement? What happens when the buoyant tank is below the surface water? Do the turbines still compress and decompress air?

What is the meaning of the pipes in figure 18 with respect to the vertical movement and buoyant tank 10 of figure 1? Where the pipes could be placed in figure 1?

What type of generator would function with the pipes? How the storage member knows when to drain the water down the pipe 56?

Also, about the wind generator disclosed in the specifications, will the wind generator function like the water generator? From figure 19, it seems like if the cylinder 61 will not make enough pressure to move vertically the buoyant tank 10.

Where is the generator? How is the invention disclosed in figure 1 link to the invention disclosed in figure 19 and the invention of figure 18? From the disclosure, it seems like if they are different independent inventions.

4. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

5. Claim 51 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In claim 51, the claim discloses a method (method of extracting power) claim, which is dependent on an apparatus claim.

In order to advance prosecution in the merits, the Prior Art will be applied as best understood by the examiner.

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claims 49-51 are rejected under 35 U.S.C. 103(a) as being unpatentable over Arnold (US 4,347,036) in view of Cockerell (4,210,821) and Vowles et al (6,109,029).

Arnold discloses a prime mover (see figures 7-9) adapted for submersion in a current of water (see abstract), a body 10, first and second hydroplanes 18 extending from the sides of the body 10 (see figure 1), the angle of inclination of the hydroplanes being changeable by rotation (see figures 4, 5) about a common axis wherein the angle of inclination has a first and second positions which creates a thrust and a controlled oscillation (see figures 4, 5).

However, Arnold does not disclose explicitly that the hydroplanes may extend in a different direction.

On the other hand, Cockerell discloses for the purpose of extracting useful energy from vertical and horizontal movement of water, a prime mover having a body with hydroplanes 87 protruding from the side of the body and oscillating vertically (see figure 25) and a prime mover 23. Also, Cockerell discloses that the body oscillates with the vertical and horizontal movement of water (column 1, lines 30-33, 42, 43) and that the by reversing the angle of the hydroplanes 87, more energy can be extracted from the current (column 9, lines 21-26).

However, neither Arnold nor Cockerell disclose explicitly having only two control members.

On the other hand, Vowles et al discloses for the purpose of improving the efficiency of fluid generators, a body with control members 55 (see figure 1).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to design a prime mover in a current of water as disclosed by Arnold and to modify the invention by having hydroplanes extending in a different direction for the purpose of extracting useful energy from vertical and horizontal movement of water as disclosed by Cockerell and to have only two control members for the purpose of improving the efficiency of fluid generators as disclosed by Vowles et al.

Response to Arguments

8. Applicant's arguments with respect to claims 49-51 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Julio C. Gonzalez whose telephone number is (703) 305-1563. The examiner can normally be reached on M-F (8AM-5PM).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nestor Ramirez can be reached on (703) 308-1371. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 308-7722 for regular communications and (703) 308-7722 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0956.

Jcg

July 3, 2003

KARL TAMAI
PRIMARY EXAMINER

